



ANT 3520 Section 2425 - Skeleton Keys: A Survey of Forensic Anthropology

Instructor: Dr. Michael Warren (mwarren@ufl.edu) phone 273-8320

Class Time and Room: Tuesday, Period 10 (5:10-6:00pm); Turlington Hall; Room L-011.
Thursday, Periods 10 and 11 (5:10-7:05pm)

Office Hours: Thursday, 2:00pm - 4:00pm, in the C.A. Pound Human Identification Laboratory, Cancer & Genetics Building, Ground Floor.

Course Objectives: This course provides a broad overview of forensic anthropology – an applied field of biological anthropology. Forensic anthropology focuses the wider scope of skeletal biology on problems of medicolegal significance, primarily in determining personal identity and cause of death from human remains. While I will not be teaching proficiency in forensic techniques in this class, we will discuss the full range of problems associated with human skeletal identification and trauma analysis. These problems will serve as a model for understanding the broader aspects of applied anthropology.

Required Textbook: Warren MW, Parr NL, Skorpinski KE and Zambrano CJ. *Bare Bones: A Survey of Forensic Anthropology, 2nd Edition*. Kendall-Hunt Publishing. ISBN: 978-0-7575-8785-60. The book is available in the campus bookstore, Orange and Blue Textbooks, and Amazon.com. *Note: The authors do not receive royalties from the sale of this textbook.*

Grading policy: There will be 3 exams. *Attendance and classroom contribution will be heavily considered.* I will attempt to reward attendance by constructing the exams so that attendance is rewarded. Final grades will be A (90-100), B+ (87-89), B (80-86), C+ (77-79), C (70-76), D+ (67-69), D (60-66), E (<60). Students are responsible for all of the information provided in the textbook. Make-up exams for excused absences will be administered on the last day of classes. Any students caught cheating will be receive an "E" for the course.

Students with letters from the Disability Resource Center should contact Dr. Warren at their earliest convenience. We will employ a note-taker to record the lectures and PowerPoints will be distributed to students requiring accommodations.

Course Outline: General topics and reading assignments. Page numbers may be inaccurate due to new text. Subject matter is subject to change at the discretion of the professor depending on current events and student interests.

January 5th: Introduction and Ground Rules: Announcement of course number, meeting times and location; Format, evaluations, text and grades; Instructor's background and interests; Student backgrounds; Review of the syllabus; Discussion of the somber subject matter and need for a professional demeanor.

January 7th: What is Forensic Anthropology? Brief history of Physical and Forensic Anthropology; Osteology, human variation and life history theory; Applied Anthropology. (*Chapter 2*)

January 10th: No Classes – Scientific Working Group for Forensic Anthropology meeting.

January 12th: Consulting and Collaboration – The team approach. Why an anthropologist instead of a pathologist? I present a case history. (*Chapter 2*)

- January 14th: Medicolegal Aspects of Death: The circumstances of human death - unattended death and/or suspicious circumstances; the origin of skeletal cases; Cause and manner of death; when is a forensic anthropologist needed? (*Chapter 1*)
- January 17th: The Medical Examiner and Coroner systems; the relationship between the pathologist and the anthropologist - the ME office or the field; Death investigations; Handling of evidence; the law and retention of anatomical specimens for evidence; bio-photography and documentation of evidence. (*Chapter 1*)
- January 19th: No Classes; celebrate Dr. Martin Luther King Day
- January 21st: Field Recovery of Human Remains: Ground penetrating radar and other geophysical techniques for discovering clandestine graves. (*Chapter 3*)
- January 24th: Field Recovery of Human Remains II: Mapping the site. (*Chapter 3*)
- January 26th: Processing Remains into Evidence: Documentation and processing; maceration. (*Chapter 3*)
- January 28th: Laboratory Protocols, Procedures and Quality Assurance.
- January 31st: Postmortem damage and taphonomy: Taphonomy and time since death - from the biosphere to the lithosphere; Carnivore and scavenger damage; Forensic Entomology; Ritual use of human skeletal material - Santeria and Palo Mayombe. (*Chapter 4*)
- February 2nd: Osteology and Osteometry: Skeletal anatomy, osteometry and the tools of skeletal analysis. (*Chapter 5*)
- February 4th: Skeletal Analysis: statistics and reference populations. (*Chapter 5*)
- February 7th: Midterm Test 1
- February 9th: Group Characteristics I - Determination of biological sex: The skeletal biology of birth. (*Chapter 6*)
- February 11th: Group Characteristics II – Age at death: Growth and development, and maturation and degeneration; determination of age at death in juveniles; the correlation between stature and age in fetuses and children. (*Chapter 8*)
- February 14th: Group Characteristics II – Age at death: Age-related pathology and metamorphic changes in bone. (*Chapter 8*)
- February 16th: Group Characteristics III – Forensic Stature: Determining stature from bones; Anatomical stature vs. recorded stature. (*Chapter 9*)
- February 18th: Group Characteristics IV: Race - fact or fiction? Clinal variation and population affinities. (*Chapter 7*)
- February 21st, 23rd, and 25th: No Classes; Annual Meeting of the American Academy of Forensic Sciences.
- February 28th: Determination of Ancestry: How anthropologists cheat to determine ancestry (*Chapter 7*)
- March 2nd: Individual Characteristics and Personal Identification: Antemortem data - medical records and family histories; Frontal sinuses, 12th ribs and other unique biological markers; old fractures and medical hardware; Forensic Odontology; comparison of antemortem and postmortem radiographs. (*Chapter 10*)

- March 4th: Midterm Test 2
- March 7th, 9th, and 11th: No Classes; Spring Break
- March 14th: Forensic Art: Two and three-dimensional facial approximation; computer-enhanced forensic art. (*Chapter 11*)
- March 16th: Trauma and Cause of Death: Antemortem and perimortem trauma – definitions; mechanisms of injury. (*Chapter 12*)
- March 18th: Trauma and Cause of Death: Ballistic trauma. (*Chapter 12*)
- March 21st: Trauma and Cause of Death: Ballistic trauma II; distinguishing military combatants from war crime victims. (*Chapter 12*)
- March 23rd: Trauma and Cause of Death: Blunt trauma and patterned injuries; sharpforce trauma. (*Chapter 12*)
- March 25th: Burned Bodies and Cremation: Can a body be destroyed by fire? The process of commercial cremation; mortuary, dental and medical artifacts in personal identification; the anthropometry of cremation. (*Chapter 13*)
- March 28th: Mass Fatalities: Disaster Mortuary Teams and jurisdiction; Techniques in identification; Theoretical approach to a new problem: passenger lists and missing persons. (*Chapter 14*)
- March 30th: Mass Fatality Case Histories: ValuJet Flight 592 and the World Trade Center. (*Chapter 14*)
- April 1st: Mass Fatality Case Histories: Hurricane Katrina. (*Chapter 14*)
- April 4th: Human Rights Missions: Documenting human rights abuses; Working with non-governmental organizations; Case history - Atrocities in the Balkans. (*Chapter 15*)
- April 6th: Missing in Action - Military Identifications: The U.S. Army Central Identification Laboratory - Hawaii; The POW/MIA issue; Fieldwork in Indochina - ancient villages and scrap metal; The nature of forensic identification in high-speed jet crashes; The importance of studies based on military repatriation data (No reading assignment; Guest Lecturer).
- April 8th: The Profession of Forensic Anthropology: Education, career paths, and organizations. (*Chapter 16*)
- April 11th: The Scientific Working Group for Forensic Anthropology (SWGANTH).
- April 13th: Final Review and Discussion
- April 15th: Tour of the C.A. Pound Human Identification Laboratory
- April 18th: Midterm Test 3
- April 20th: All make-up exams for excused absences will be administered during this final class period.